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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,205	08/22/2006	Markku Keskiniva	47121-5021-00 (230541)	5093
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EXAMINER				
LOPEZ, MICHELLE				
ART UNIT		PAPER NUMBER		
3721				
MAIL DATE		DELIVERY MODE		
03/17/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/590,205

**Applicant(s)**

KESKINIVA ET AL.

**Examiner**

Michelle Lopez

**Art Unit**

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/04/10 has been entered.

#### ***Examiner's Comments***

2. With respect to claim 1, it appears applicant is invoking 35 U.S.C. 112, sixth paragraph and therefore the specific element means for performing a specific function are interpreted to include the specific structure of the element means per the specifications and/or its equivalents thereof. Specifically, paragraph [0013-0015] of the specifications describe the "means for" feeding and returning pressure liquid, and for producing a stress pulse to comprise the structure of a separate pressure fluid pump and a fluid channel, and "means for" intermittently feeding to a charging pressure chamber pressure liquid to comprise the structure of a valve and a tank. Clarification of applicants' intentions is requested.

3. Claims 1-6 remain pending.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Temple (USPN 787,960) in view of Axinti rt al. (USPN 4,688,468).

Temple discloses a pressure-fluid operated percussion device (page 1, lines 9-15), comprising: a frame (a) allowing a tool (not shown numerically; page 1, lines 70-73) to be arranged therein movably in its longitudinal direction, means for feeding pressure fluid to the percussion device and for returning pressure fluid to a pressure tank via (b); means for producing a stress pulse via (f); a working chamber (above the piston d) filled with pressure fluid and, between the working pressure chamber and the tool, a transmission piston (d) movably arranged in the frame and which is in contact with the tool at least during stress generation (as seen in page 1, lines 66-73), and a charging pressure chamber (below the piston d) on the side of the piston facing the tool; a pressure fluid source (r) connected to the working pressure chamber via valve (c) in order to maintain pressure in it (page 1, lines 50-58 and 80-84), and means for intermittently feeding to the charging pressure chamber with pressure fluid whose pressure enables the transmission piston to be pushed towards the working pressure chamber (page 1, lines 84-89) and into a predetermined backward position of the transmission piston such that pressure fluid is discharged from the working pressure chamber (page 1, lines 90-94), alternately, allowing pressure fluid to be discharged rapidly from the pressure charging chamber to push the piston towards the tool (page 1, lines 96-96, cont. in page 2, lines 1-3), compressing the tool and thus generating a stress pulse in the tool while maintaining the piston in contact with the tool during compression of the tool (i.e. pulsating a tool; page 1, lines 9-15, 50-58, and 70-73).

Regarding claim 1, although Temple shows a percussion device operated by compressed air (page 1, lines 9-15), Temple fails to disclose wherein the percussion device is operated by pressurized liquid. Axinti shows a percussion device operated by pressurized liquid for the purpose of efficiently controlling the reciprocation of a driving piston (1). The modification of Temple by substituting a pneumatic power source (as taught by Temple) by a hydraulic power source (e.g. pressurized liquid, as taught by Axinti) would have been obvious because the substitution of one known and equivalent mechanism for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention and the technique for improving a particular class of devices was part of the ordinary capabilities of a person skill in the art. Thus such substitution would have provided the same predictable results of efficiently reciprocating a percussion piston within a frame.

Additionally, with respect to claim 1, Temple does not specifically disclose wherein the tool is arranged within the frame. Note, that Axinti also shows wherein a tool (18) is arranged within a frame (15) in order to properly guide its reciprocation.

Regarding claim 2, Temple shows wherein the means for feeding pressure fluid to the working chamber are arranged to feed the pressure fluid such that pressure in the working chamber remains substantially constant during operation of the percussion device (page 1, lines 50-58).

Regarding claim 3, Temple shows wherein the pressure fluid of equal pressure is fed to both the working and the charging pressure chambers via opening of valve (c).

Regarding claim 4, Temple shows wherein the working pressure chamber is connected to a source of pressure fluid, such that the pressure fluid source tries to feed pressurized fluid thereto continuously while the valve (c) remains open.

Regarding claims 5-6, Temple shows a pressure accumulator (z) and wherein the source of pressure fluid (r) is a pump.

***Response to Arguments***

5. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.
6. For the reason above the ground of rejection are deemed proper.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the attached PTO-892 for related art.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Lopez whose telephone number is 571-272-4464. The examiner can normally be reached on Monday - Thursday: 8:00 am - 6:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle Lopez/  
Examiner, Art Unit 3721

/Rinaldi I Rada/  
Supervisory Patent Examiner, Art Unit 3721